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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/301,749	04/29/1999	KEN R POWELL	104.012	6014

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EXAMINER

NGUYEN, CUONG H

ART UNIT PAPER NUMBER

3625

DATE MAILED: 12/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/301,749

Applicant(s)
Powell et al.

Examiner
Cuong H. Nguyen

Art Unit
3625



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Sep 26, 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-24, 26, 28-40, and 42-46 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-24, 26, 28-40, and 42-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

DETAILED ACTION

1. This Office Action is the answer to the communication received on 9/25/2002 (the 3-months extension & amendment).
2. Claims 19-24, 26, 28-40, 42-46 are pending in this application.

Response to Amendment

- 3.A. Applicants' arguments received by PTO on 9/25/2002 have been fully considered but they are not persuasive with previous cited references of **Ken Power**.
- 3.B. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

3.C. It is considered that sufficient evidences are provided from the references of **Ken Power** (main inventor of this pending application).

3.D. The examiner disagrees about a conclusion on page 6, para.5, that "No reasonable combination of the art of record suggests this particular combination, including the recited 2nd processing unit and discount quantity" **Power** suggests claimed limitations either implicitly or explicitly in cited prior art.

3.E. During patent examination, the pending claims must be given the broadest reasonable interpretation.

Reading a claim in light of the specification, to thereby interpret limitations explicitly recited in the claim, is quite different from reading limitations of the specification into a claim, to thereby narrow the scope of the claim by implicitly adding disclosed limitations which have no express basis in the claim (see *In re Prater*, 162 USPQ 541 (CCPA 1969)).

3.F. It is reasonable that various modifications of previous Ken Power's inventions would be apparent to those skilled in the art at the time of invention without departing from the scope and spirit of these inventions because this application mainly claim the rearranging components in order to calculate a total amount due taking into account with signals from coupon amounts. Although cited invention may has been described in connection with specific preferred

embodiments, it should be understood that their limitations as disclosed should not be unduly limited to such specific embodiments.

Claim Rejections - 35 USC § 102

A. Claims 19, and 29 are rejected under 35 U.S.C. § 102(e) as being anticipate at least by Ken Powell (USP. 5,884,278).

A1. In regard to claim 19, it is directed to a system for operating with portable cards each having a card memory, and a store having products.

Powell discloses the same system with the same devices as claimed (see Figs. 3A-3B, 6A-6B), and 14. The claimed "an electromagnetic detector" was a scanner/bar code reader (see Powell, Fig.25, and 16:3-4); a card interface was claimed by Powell's claim 1; Powell teaches "Correlating signals" for matching a predetermined value to a specific product/item (e.g., LUT). The claimed system is similar as the system claimed by Powell Fig.14 since it already has full capabilities to perform all of these claimed limitations (i.e., Ken Powell teaches a system for operating with portable cards each having a card memory, and a store having a plurality of products, comprising:

- a plurality of cash register stations (see Fig.14), each cash register station (see Fig.14,

ref.930); including an electromagnetic detector (see Fig.14, bar code reader 910) for generating first signals corresponding to product pricing and for generating second signals identifying products selected for purchase (this is inherent for a bar code scanner, sequentially scanning a bar code for a product price then evoking another step of that flow);

- a card interface for reading third signals corresponding to product pricing from the card memory of a portable card (see Fig.14, ref.920);
- a first processing unit (see Fig.14, ref.930) that executes a first program in a first memory to correlate second signals with first signals (see Fig.14, correlating 915 with 911 to obtain 912), wherein the system also includes a plurality of second processing units (see Fig.14, ref.952);, each second processing unit executing a second program in a second memory (see Fig.14, ref.942), to determine a discount quantity (see 12:13-51) & see step 19060) by correlating second signals from the electromagnetic detector, in a respective one of the cash register stations, with the third signals read by the card interface, in the respective one of the cash register stations).

A2. In regard to claim 29, it is directed to a system for operating with portable cards each having a card

memory, and a store having products. Therefore, this claimed system is the same as the system in claim 19 with an extra task of "determining a total due" in the 1st processing unit, this extra task was disclosed by Powell Fig.19 (refs.19065 and 19060) and similar rationales for rejection of claim 19 are applied, and since Powell teaches a similar system that already have full capabilities to perform all of these pending limitations.

Claim Rejections - 35 USC § 103

B. Claims 20-24, 26, 28, 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ken Powell (US Pat. 5,884,278).

Ken Powell suggests all limitations for above claims; please note that Ken Powell et al. already have intellectual property ownership of these very similar claimed limitations.

B1. As per claim 20: Powell teaches that each second processing unit/CPU (see Powell, Fig.14, ref.952) is in a respective cash register station (see Powell, Fig.13, "CHECKOUT STATION 900").

B2. As per claim 21: Powell teaches a central computer (see Fig.13, ref. 800) that communicates product pricing information with each of the first processing unit/CPU 950 (see Powell, Fig.14, ref 930) via bus 1510.

B3. As per claim 22: Powell teaches a network including a common computer that communicates pricing information via bus 1510, wherein the first processing unit/CPU 950, of each cash register station 930, is in the network (see Fig. 13, ref. 1000), and wherein the second processing unit/CPU (see Powell, Fig.14, ref.952), of each cash register station (see Powell, Fig.13, "CHECKOUT STATION 900"), receives the second signals from a signal path that excludes the network (see Powell, Fig.14, bus 915).

B4. As per claim 23:

Powell does not expressly disclose a switch as in claim 23.

However, it would be obvious to one of ordinary skill in the art that Powell puts a switch after a decision block 19042 to display a "total price" (see Fig.19, block 19060 and block 19065); said switch would generate a signal indicating the end of a checkout transaction for a customer (see Powell, Fig.19, ref.19042), such switch/button would be activatable by a clerk, wherein the second processing unit/CPU (see Powell, Fig.14, ref.952), is in a signal path 915 between a switch for activating "2-1 MULTIPLEXOR 939" and the first processing unit/CPU 950 (see Powell's procedure, Fig.19, ref.19042). The motivation for this

action is merely adding "a button" for easily controlled by a clerk.

B5. As per claim 24: In a similar fashion, Powell suggests a signal path from the second processing unit 952 to the first processing unit 950, wherein the second processing unit 952 sends a signal indicating a related information about that item (e.g., a related discount) to the first processing unit 950, via a signal path (see Powell, Fig.14, bus 915).

It would be obvious to one of ordinary skill in the art to identify that "related information" in Powell's patent is a tender of a discount because Powell discloses "2-1 MULTIPLEXOR 939" feeding said "related information" to CPU 950 for processing wherein MULTIPLEXOR 939 performs a similar function for an inputted discount.

B6. As per claim 26: Powell does not expressly disclose a switch as in claim 23.

However, it would be obvious to one of ordinary skill in the art that Powell puts a switch after a decision block 19042 to display a "total price" (see Fig.19, block 19060 and block 19065); said switch would generate a signal indicating the end of a checkout transaction for a customer (see Powell, Fig.19, ref.19042), such switch/button would be activatable by

a clerk, wherein the second processing unit/CPU (see Powell, Fig.14, ref.952), is in a signal path 915 between a switch for activating "2-1 MULTIPLEXOR 939" and the first processing unit/CPU 950 (see Powell's procedure, Fig.19, ref.19042). The motivation for this action is merely adding "a button" for easily controlled by a clerk.

Powell does not expressly disclose that "wherein a signal path between the switch and the first processing unit excludes the second processing unit".

However, this is a system claim and the different arrangement for a signal path to exclude a 2nd CPU is not significant concept; one of ordinary skill in the art would utilize Powell's patent to suggest an additional switch/button between "2-1 MULTIPLEXOR 939" and CPU 950 for expressing the claimed idea of a signal path between the switch and the first processing unit excludes the second processing unit" in the structure of Fig.14.

B7. As per claim 28: In a similar fashion, Powell suggests a signal path from the second processing unit 952 to the first processing unit 950, wherein the second processing unit 952 sends a signal indicating a related information about that item (e.g., a related

discount) to the first processing unit 950, via a signal path (see Powell, Fig.14, bus 915).

It would be obvious to one of ordinary skill in the art to identify that "related information" in Powell's patent is a UPC coupon because Powell discloses "2-1 MULTIPLEXOR 939" feeding said UPC coupon to CPU 950 for processing wherein MULTIPLEXOR 939 performs a similar function for an inputted discount; furthermore, a UPC coupon representing a bar code is considered as a non-functional descriptive material that is obvious to function as an "input" to a MULTIPLEXOR 932.

B8. As per claim 30: Powell does not expressly disclose a system wherein a fourth signal corresponds to a discount tender.

However, a discount tender/a formal offer in money is suggested by Power, that amount is determined and is displayed by total price (see Powell, Fig.19, ref. 19053).

It would be obvious to one of ordinary skill in the art to use Powell's patent for using "a fourth signal corresponds to a discount tender" because the different order in receiving a signal representing this discount amount for calculation is not effecting a total balance due to a purchaser.

B9. As per claim 31: Powell teaches that a peripheral device is an input device (see Powell, Fig.14, bar code reader 910).

B10. As per claim 32: Powell obviously suggests that a signal path carries product identification information (see Powell, Fig.14, ref. 916).

B11. As per claim 33: Powell teaches that a peripheral device is the electromagnetic detector (see Powell, "Each checkout station includes a UPC bar code reader that detects an optical (electromagnetic) signal reflected from a UPC symbol").

B12. As per claim 34: Powell teaches a check-out system of including a medium (memory 920 of Fig.14) for a first computer network, wherein a first network-interface 937, in each cash register station 930, is an interface to the first computer network (see Powell, Fig.14, network interface 937).

The examiner submits that these claims' limitations were widely used in computer related art specifically in cash registers/check-out stations in retailed stores, claiming a medium that assist communication between 2 components is fundamental.

One of ordinary skilled in the art at the time of the invention can ascertain the essential characteristics of cited reference and, without departing from the spirit and scope thereof, can make

modifications of Ken Power's reference to use that system in rearranging structures of a cash register to obtain "total amount due" after subtracting coupon amounts (employing multiple network interfaces at each cash register, and receiving signals from portable cards at each cash register).

Conclusion

7. All pending claims are rejected.

8. These references are considered pertinent to applicants' disclosure; analogous rationales and related references for rejections can also be read on 09/301,749, 09/317,440 or 09/320,664 since similar subject matter of invention is interpreted.

- **Ken Powell**, US 5,884,278 - Retail store and method employing multiple network interfaces at each cash register, and receiving signals from portable cards at each cash register; at least networking in communicating signals, redemption discount coupons, UPC symbols, using electromagnetic detector to generate signals by detecting light reflected from paper substrates, specific signals are communicating via signal paths that excluding some network interfaces, receiving signals from portable cards at each cash register, and correlating related data signals; this patent's subject matter is similar to the pending application.

- **Ken Powell**, US 5,956,694 - System and method for distributing and processing discount coupons; at least this patent suggests about a respective key (hand-actuated switch) for generating a customer characterization signal; this patent's subject matter is similar to the pending application.
- **Ken Powell**, US 6,112,988 - Retail store configured for bi-directional communication between a plurality of product shelf areas and a plurality of portable cards; wherein redeeming electronic coupons for products of interest, and UPC data are discussed; this patent's subject matter is similar to the pending application.
- **Halperin et al.**, US 6,105,004 - Product monitoring system particularly useful in merchandising and inventory control; wherein **Halperin et al.** suggested about: storing the identification of products, displaying specific information, reading in/out those identifications, recording same in record memory for a respective portable unit, employing portable units each having a record memory .etc.
- **Ken Powell**, US Pats. 5,727,153 and 6,105,002 - Retail store having a system of receiving electronic coupon information from a portable card and sending the received coupon information to other portable card; at least distributing and redeeming electronic coupons at cash registers, reading UPC data were suggested; this

patent's subject matter is similar to the pending application.

- Ken **Powell**, US 5,890,135 - System and method for displaying product information in a retail system; wherein **Powell** discussed about: displaying and redeeming electronic discount coupons in a store's cash register, reading/checking UPC data .etc.
- **Murrah et al.**, US 5,804,807 A and 5,984,182 - Scan-ahead system for processing merchandise at a checkout register; wherein **Murrah et al.** suggested about: a checkout system with a portable scanner to read UPC codes .etc.
- **Ken Powell**, US 5,727,153 A - Retail store having a system of receiving electronic coupon information from a portable card and sending the received coupon information to other portable cards; wherein **Halperin et al.** suggested about: storing the identification of products, displaying specific information, reading in/out those identifications, recording same in record memory for a respective portable unit, employing portable units each having a record memory .etc.
- **Takahashi et al.**, US 4,419,738 A - Unit-price presetting method for electronic cash register; wherein a method for unit-price presetting was discussed, electronic cash registers with portable memory were utilized.

- **Ken Powell**, US 6,339,762 - Retail store efficiently configured to distribute electronic coupons at multiple product locations; wherein redeeming electronic coupons for products of interest, and UPC bar code reader data are discussed; this patent's subject matter is similar to the pending application.

- **Ken Powell**, US 6,243,687 B1 - Kiosk systems and methods for issuing a card storing electronic coupons, after receiving data about a customer; wherein redeeming electronic coupons for products of interest, and UPC data are discussed.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cuong H. Nguyen whose telephone number is 703-305-4553. The examiner can normally be reached on Mon.-Fri. from 7:15 AM to 3:15 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Wynn Coggins, can be reached on (703)308-1344.

Any response to this action should be mailed to:

Amendments

***Commissioner of Patents and Trademarks
Washington D.C. 20231***

or faxed to: (703)305-7687 ***[Official communications]***

or 703-746-5572 (RightFax)

09/301,749
Art Unit 3625

Hand delivered responses should be brought to
Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 7th
floor receptionist, whose number is: (703)308-1113.

Cuong Nguyen
Dec. 14, 2002